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Remarks:

Regarding the objection to claims 8, 9 under 37 CFR 1.75:

In this paper the applicant cancels claim 9 which believed to render the objection moot.

Regarding the provisional "double patenting rejection" of the claims

The applicant notes that the Examiner has entered a *provisional* double-patenting rejection of the claims of the instant application in view of the copending claims of US Ser.No. 10/789018.

As the Examiner has correctly pointed out, the rejection remains *provisional* in that no claims in either the instant application or those of US Ser.No. 10/789018 have been allowed, thus rendering the double-patenting rejection of the claims as premature. The Examiner is invited to reinstate the double-patenting rejection upon an indication of allowable claims.

Regarding the rejection of claims 1, 2, 4-7, 10-12, 14 and 15 under 35 USC 102(b) in view of WO 01/77278 to Blandiaux:

The applicant traverses the rejection of the indicated claims in view of the Blandiaux reference.

Reviewing the Blandiaux disclosure, the compositions described therein essentially require at least the following constituents which are necessarily preset in order to provide the liquid crystal compositions of that reference:

- “1% to 30% of a magnesium salt of a C₈-C₁₆ linear alkyl benzene sulfonate surfactant;
- 1% to 20% of a water-mixable cosurfactant having either limited ability or substantially no ability to dissolve oily or greasy soil;
- 0.1% to 5% of a magnesium salt such as magnesium oxide, magnesium sulfate heptahydrate or magnesium chloride;
- 0.1% to 10% of a perfume, essential oil, or water insoluble hydrocarbon having 6 to 18 carbon atoms and mixtures thereof;
- 1% to 20% of at least one ethoxylated nonionic surfactant;

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0.1% to 3% of an unsaturated fatty acid having 12 to 20 carbon atoms;
0.01% to 0.5% of an alkali metal hydroxide such as sodium hydroxide or potassium hydroxide;
0.1% to 2% of a hydroxy containing organic acid selecting from the group consisting of lactic acid, citric acid or the hydroxy benzoic acid and mixtures thereof;
0.01% to 1% of a polymeric thickener such as methacrylate, xanthan gums and hydroxy alkyl celluloses such as hydroxy ethyl cellulose;
0.1% to 10% of an abrasive; and
the balance being water, wherein the liquid crystal detergent composition does not contain any grease release agents such as choline chloride or buffering system which is a nitrogenous buffer which is ammonium or alkaline earth carbonate, guanidine derivatives, alkoxyalkyl amines and alkyleneamines C₃-C₇ alkyl and alkenyl monobasic and dibasic acids such as C₄-C₇ aliphatic carboxylic diacids which do not contain a hydroxy group, boric acid, phosphoric acid, amino alkylene phosphonic acid and the composition is pourable and has a storage modulus equal to or higher than one Pascal (1 Newton/sq. m.), more preferably higher than 10 Pascal at a temperature of 20.degree. C. to 40.degree. C. at a strain of 0.1% to 5% and a frequency of 10 radians per second as measured on a Carri-Med CS Rheometer and is thermally stable and exist as a clear liquid crystal in the temperature range from 8C. to 43°C, more preferably 4°C to 43°C. “

As is readily understood from the above, the liquid crystal compositions of Blandiaux would necessarily require that *each* and *every one* of the above recited constituents be necessarily present in order to provide the “liquid crystal” compositions which exhibit the types of properties recited by Blandiaux at col. 10, lines 23 – 50. Therein Blandiaux discusses at length the “lyotropic structure” of his compositions, as an essential characteristic of his compositions.

It is the present applicant's view that their present compositions are not properly considered to be obvious from the Blandiaux liquid crystal compositions for several reasons.

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First, a skilled artisan would be dissuaded from making any changes to the Blandiaux compositions, either by omission of any constituent(s), or by addition or substitution of any constituent(s) as such would be expected to disrupt the particular rheological structure and properties of the Blandiaux compositions which clearly require a delicate balance of not less than 10 distinct essential constituents. It would similarly be abundantly clear to such a skilled artisan that modification of the Blandiaux formula, either by the addition of further constituents not specified by Blandiaux, or any reduction in the specific constituent recited by Blandiaux beyond those specifically elucidated would fall outside of the scope of his teaching, and also would likely be expected to disrupt the particular rheology and other technical characteristics which are provided by those prior art compositions.

In contrast, it is clear by inspection and comparison that the present applicant's compositions do not require the same family of 10 essential constituents in order to provide their compositions. It is contended that Blandiaux is properly limited to what it teaches and suggests, which is that require a delicate balance of not less than 10 distinct essential constituents is required in order to produce a successful liquid crystalline composition according to Blandiaux. The applicant's much simpler compositions are not anticipated by Blandiaux, as well as being unobvious over Blandiaux's composition.

Second, while Blandiaux recites that in his liquid crystal compositions 0.1 – 10% of a selected abrasive can be present, he also immediately thereafter the actual useful range of his abrasive is circumscribed when he states that “preferably 0.25 to 2%wt. of an abrasive selected from the group consisting of amorphous hydrated silica and polyethylene powder particles and mixtures thereof.” may be used. A review of the few, working examples of the Blandiaux compositions at column 11 indeed reveals that only 1.1%wt. of “Tixosil 103” an amorphous silicon is present. It is quite clear that Blandiaux recites only a very circumscribed group of abrasives which might find use, and that in only very small amounts.

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However, quite pertinently Blandiaux fails to teach or even remotely suggest the utility of visibly discrete particles based on alginate materials such as are provided in the instant invention.

In view of the foregoing it is believed that the Examiner's further reliance on Blandiaux against the presently presented claims is inappropriate. Reconsideration of the grounds of rejection and withdrawal of the Blandiaux reference from further consideration is solicited.

Regarding the rejection of claims 1-3, and 8-16 under 35 USC 102(e) in view of WO 03/020863 to Cheung:

The applicant traverses the rejection of the indicated claims in view of the Cheung reference. The applicant points out that the invention of WO 03/020863 is not one which is believed to qualify as a valid reference under 35 USC 102(e) as that the reference invention is not by "another" pursuant to the statute as there exists both (a) at least one common co-inventor, as well as (b) common ownership in the subject matter of the invention at the time it was made.

In view of the foregoing it is believed that the Examiner's further reliance on the Cheung reference against the presently presented claims is inappropriate. Reconsideration of the grounds of rejection and withdrawal of the Cheung reference from further consideration is requested.

Regarding the rejection of claims 1, 8, 9 and 16 under 35 USC 102(a) in view of WO 02/062973 to Munk:

The applicant traverses the rejection of the indicated claims in view of the Munk reference.

As would be evident to a skilled artisan reading the Munk reference, the focus of that reference is the discovery that the addition of a peptide extension to the C-terminal amino

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acid of a lipase may be used as an enzyme in a laundry detergent composition. Test fabric swatches, soiled with a fatty stain which is cured prior to washing in a wash liquor are alleged to have a reduced tendency to exhibit malodours from the laundered swatches. This is believed to be a result of the activity of the enzyme preparation based lipases which include the peptide extension to the C-terminal amino acid. The sole utility of these enzyme preparations recited by Munk is in detergents, particularly in laundry detergent applications.

While the Munk enzyme preparations appear to be beneficial, the present applicants contend that these compositions fail to anticipate, or for that matter, suggest the currently claimed compositions. First it is to be pointed out that whereas the Examiner points to the example formulation on page 8, which may be read in view of the recitation at page 11 which recites the formation of certain alginate beads which might be carriers for Munk's enzyme preparation based lipases which include the peptide extension to the C-terminal amino acid, nonetheless it not seen how these references can be fairly stated to anticipate the presently claimed invention. It is quite clear from the Munk reference at page 13, lines 1 – 18 that a wash liquor was formed in the experiment performed, and only thereto does it appear that amounts of a "the lipase variant" was added to this highly aqueous wash liquor. However it is unclear whether this lipase variant is indeed the alginate bead, or whether it is not. This appears to confusing, and raises the issue of uncertainty as to what is actually disclosed.

Further, it is also quite clear from the Munk reference that Munk fails to describe or demonstrate a thickened aqueous composition which would include particles based on alginate materials. A review of the Munk reference, namely at page 8 – 9, as well as pages 9 – 10 fail to disclose thickener constituents generally, and specifically fail to disclose the thickener constituents now recited in presently amended claim 1. Absent the inclusion of a thickener constituent it cannot be seen how stable suspensions of discrete particulates based on alginate materials, as per preferred embodiments of the instant invention can be formed.

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In view of the foregoing it is believed that the Examiner's further reliance on the Munk reference against the presently presented claims is inappropriate. Reconsideration of the grounds of rejection and withdrawal of the Munk reference from further consideration is requested.

Regarding the rejection of claims 1-3, 8, 9, and 16 under 35 USC 102(e) in view of US 6635702 to Schmucker-Castner:

The applicant traverses the rejection of the indicated claims in view of the Schmucker-Castner reference.

As is clearly evident from a review of the Schmucker-Castner reference, an essential constituent of those prior art formulations is the necessary inclusion of "a substantially crosslinked alkali-swellaable acrylate copolymer rheology modifier" (Schmucker-Castner, col.2, lines 34 - 37) which is clearly an essential constituent used by Schmucker-Castner in order to achieve his thickened shampoo compositions. Schmucker-Castner recites his essential alkali-swellaable acrylate copolymer rheology modifiers to be specific classes of such materials at great lengths in his specification. (Schmucker-Castner, col. 3, line 22 - col. 5, line 40).

The presently amended claims are amended to more clearly define the thickener constituent which is not the alkali swellaable acrylate copolymer constituent required of Schmucker-Castner in order to achieve stable suspensions of particulate materials.

In view of the foregoing it is believed that the Examiner's further reliance on the Schmucker-Castner reference against the presently presented claims is inappropriate. Reconsideration of the grounds of rejection and withdrawal of the reference from further consideration is requested.

Regarding the rejection of claims 1, 4-7, 14 and 15 under 35 USC 102(b) in view of EP 216416 to Iding:

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The applicant traverses the rejection of the indicated claims in view of the Iding reference.

It is evident from the Iding reference that an essential constituent to those compositions are high molecular weight polyacrylate thickeners having molecular weight of 0.5 – 1.5 million, with preferably 1-4% crosslinking (Iding, page 6, lines 18 – 26).

The presently amended claims are amended to more clearly define the thickener constituent which are not the high molecular weight polyacrylate thickeners required by Iding in order to achieve stable suspensions of particulate materials.

In view of the foregoing it is believed that the Examiner's further reliance on the Iding reference against the presently presented claims is inappropriate. Reconsideration of the grounds of rejection and withdrawal of the reference from further consideration is requested.

Regarding the rejection of claims 1, 8, 9 and 13-15 under 35 USC 102(b) in view of EP 292910 to Fonsny:

The applicant traverses the rejection of the indicated claims in view of the Fonsny reference.

Fonsny's compositions are directed to "scouring cleansers" which necessarily include an abrasive material, which Fonsny recites may be derived from polymerizable composition, "such as polyethylene, polypropylene, polystyrene, polyester, polyvinyl chloride, polyvinyl acetate, polymethylmethacrylate and various copolymers and interpolymers of the foregoing." (Fonsny, page 4, line 9 – 13) Fonsny demonstrates the use of polyvinyl chloride powder/beads produced by an emulsion polymerization process. (Fonsny, "Example I".) It is quite clear from the Fonsny disclosure that Fonsny teaches and contemplates a limited list of synthetic polymer materials, as specifically recited, for his compositions. These materials may provide a good low-scratch scouring benefit to the

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Fonsy compositions however, Fonsy fails to teach or suggest the use of visibly discrete particles based on alginate materials, such as is presently presented in the amended claims.

Additionally Fonsy fails to teach or demonstrate composition wherein his abrasive materials, for that matter any other materials are provided such that stable suspension of said materials is provided upon standing, such as is taught by the present applicant. Although Fonsy mentions in passing the possible utility of certain thickener constituents, he fails to recite any specificity with respect to these, and how they could produce compositions according to the preferred embodiments recited by the present inventors. Quite notably, none of Fonsny's example compositions comprise a thickener constituent recited as an optional constituent by Fonsny.

In view of the foregoing it is believed that the Examiner's further reliance on the Fonsny reference against the presently presented claims is inappropriate. Reconsideration of the grounds of rejection and withdrawal of the Fonsny reference from further consideration is requested.

Regarding the rejection of claims 1-7, and 13-15 under 35 USC 102(b) in view of US 6339058 to Toussaint:

The applicant traverses the rejection of the indicated claims in view of the Toussaint reference.

As is evident from a reading of the Toussaint reference, the compositions disclosed therein are directed to "high foaming, light duty liquid cleaning compositions" which necessarily contain: a nonionic surfactant, an anionic sulfonate surfactant, an anionic sulfate surfactant, a polyacrylate thickener constituent, an alkali metal hydroxide, an oil containing gelatin beads, and water. (Toussaint, col. 3, lines 24 - 46).

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A skilled artisan would, upon a closer reading of the Toussaint reference would be taught that a sole class of thickener constituent is necessary to those compositions, namely "Carbopol Aqua 30" (ex. B.F. Goodrich Co.) which is a non-associative lightly crosslinked acrylate copolymer consisting of a mixture of a specific acrylic acid copolymer and methacrylic acid copolymer. Furthermore, Toussaint teaches that this specific thickener is essential to ensure suspension of his gelatin beads. (Toussaint, col. 6, lines 9 – 24). Toussaint is wholly silent as to the utility of the types of thickeners recited in presently amended claim 1 presented herein.

As the presently amended claims are amended to more clearly define the thickener constituent which are not the lightly crosslinked acrylate copolymer thickener constituent required by Toussaint in order to achieve stable suspensions of particulate materials, the present rejection is believed to be moot, and it is believed that the Examiner's further reliance on the Toussaint reference against the presently presented claims is inappropriate; reconsideration of the grounds of rejection and withdrawal of the reference from further consideration is solicited.

Regarding the rejection of claims 1-3, 8, 9 14 and 15 under 35 USC 102(b) in view of US 6037316 to Garner:

The applicant traverses the rejection of the indicated claims in view of the Garner reference.

A review of the Garner document reveals that the apparent contribution to the prior art relates to the addition of a "water soluble borax pentahydrate, at least a part of which is undissolved, forming an abrasive portion" in a composition which further requires only a surfactant selected from a nonionic surfactant, or a combination of a nonionic and an anionic surfactant. (xx, col. 2, lines 28 – 35). A skilled artisan carefully reviewing the xx document would understand that the water soluble borax pentahydrate is the keystone to the formulations provided by xx, as evidenced by the copious and careful description

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concerning this constituent (xx, col. 4, line 57 – col. 5, line 45). A further reading of the xx document also reveals that xx fails to discuss (a) alginate based materials, as well as any form of thicker constituent, save a mention of sodium chloride which is noted to be a useful viscosity modifier. (xx, col. 6, line 23). As the Garner reference fails to mention constituents which are essential to the inventor's presently claimed compositions, it is not believed that the Examiner's further reliance on the Garner reference is appropriate. Accordingly, reconsideration of the grounds of rejection and withdrawal of the reference from further consideration is respectfully requested.

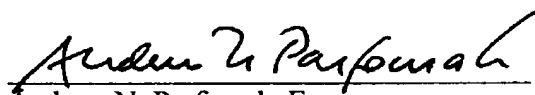
The issuance of a *Notice of Allowability* at an early date is respectfully requested.

Should the Examiner believe that telephonic communication would meaningfully advance the prosecution of the present application, they are invited to contact the undersigned at their convenience.

Authorization for Fees

Please charge the fees required in order to permit the timely entry of this paper, including additional claims fees, and if necessary any extension of time should such be required, to Deposit Account No. 14-1263.

Respectfully Submitted;


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